10

5

(6). Monomer was available and had been shown to improve adhesion on several substrates.

The coatings obtained using strategies 1-5 showed adhesion properties. However, the use of monomer (11) is the preferred method, especially in adhering to metal surfaces.

Initial experiments on the acrylic network showed that enough adhesion can be obtained to remove the template (hexachlorobenzene) from the imprinted matrix. After removal of the template, QCM measurements were performed with aqueous solutions of hexachlorobenzene (1.3 to $2.8 \times 10^{-8} \,\mathrm{M}$), benzene (5 x $10^{-8} \,\mathrm{M}$), cyclohexane (5 x $10^{-8} \,\mathrm{M}$), chlorobenzene (5 x $10^{-8} \,\mathrm{M}$) and anisole (5 x $10^{-8} \,\mathrm{M}$). The results are reproduced in the following figure:

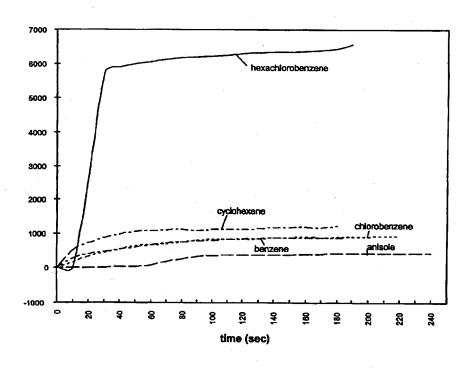


Figure 5. QCM measurements in aqueous solutions.

The results can be summarized as follows. The sensor displays selectivity with regard to cyclohexane, benzene, chlorobenzene and anisole. A signal at least six times